



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/842,801	04/27/2001	Laurent Baretzki	206483US2X	2836
22850	7590	07/20/2006	EXAMINER	
C. IRVIN MCCLELLAND OBLON, SPIVAK, MCCLELLAND, MAIER & NEUSTADT, P.C. 1940 DUKE STREET ALEXANDRIA, VA 22314			NGUYEN, HAI V	
			ART UNIT	PAPER NUMBER
			2142	

DATE MAILED: 07/20/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/842,801	BARETZKI, LAURENT	
	Examiner	Art Unit	
	Hai V. Nguyen	2142	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 03 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 01 May 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 17-26 and 28-44 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 17-26 and 28-44 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

Art Unit: 2142

DETAILED ACTION

1. This Office Action is in response to the communication received on 01 May 2006.
2. Claims 43-44 are new.
3. Claims 1-16, 27 are cancelled.
4. Claims 17-26 and 28-44 are presented for examination.

Response to Arguments

5. Applicant's arguments and amendments received on 01 May 2006 have been fully considered but they are not deemed fully persuasive. Applicant's arguments are deemed moot in view of the following new ground(s) of rejection as explained here below, necessitated by Applicant's substantial amendment (i.e., in claims 17, 39) to the claims which significantly affected the scope thereof.

Claim Objections

6. Claims 21 and 38 are objected to because of the following informalities: The claims 21 and 38 are duplicated. Appropriate correction is required.

Claim Rejections - 35 USC § 102

7. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102(b) that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

8. Claims 17-19, 21 are rejected under 35 U.S.C. 102(b) as being anticipated by Li et al. US patent # 5,473,599.

Art Unit: 2142

9. As to claim 17, Li teaches substantially the invention as claimed, including a redundant routing system, comprising:

- a first routing unit (*Fig. 2, R1*) configured to manage input and output data;
- a second routing unit (*Fig. 2, R2 or R3 or R4*) configured to manage input and output data;
- a network interface (*Fig. 2, network segment 118*) connecting said first and second routing units;
- a standby bus interface (*Fig. 1, cable 120*) connecting said first and second routing units to each other;

wherein, when said first routing unit is managing said input and output data, said second routing unit is configured to detect a failure of said first routing unit by monitoring both said network and standby bus interfaces using messages (*Li, Hello messages, Coup messages, resign messages*) sent over both the network and the standby bus interface (*Fig. 2, col. 2, line 15 – col. 3, line 40*);

wherein, when said second routing unit (*the new or standby router*) detects a failure (*Li, a failure or a resign or leaving*) of said first routing unit (*the active router*), said second routing unit is configured to deactivate said first routing unit (*Li, coup message*) so that said first routing unit no longer manages said input and output data and said second routing unit is further configured to start managing said input and output (*Fig. 2, col. 2, line 15 – col. 3, line 40; Fig. 5, send a coup message to the active router (box 184) and assuming the active router state (box 150)*); and

Art Unit: 2142

wherein set of parameters (*preference values*) for interpreting the messages, comprising configuration parameters (*preference values*) of an application running on at least one of the first and second routing units, are stored in at least one configuration file (*Fig. 1, stored in memory 62*) included in both said first and second routing units (*Figs. 1, 2, col. 1, lines 39-51; col. 2, line 15 – col. 3, line 40*).

10. As to claim 18, Li teaches, wherein said first and second routing units have identical functions and include identical software and configuration files (*Figs. 1, 2, col. 1, lines 39-51; col. 2, line 15 – col. 3, line 40*).

11. As to claim 19, Li teaches, further comprising at least one serial link connecting said first and second routing units to at least one other system (*Fig. 2b, one other group*) (*Figs. 1, 2, col. 1, lines 39-51; col. 2, line 15 – col. 3, line 40*).

12. As to claim 21, Li discloses, when said first routing unit detects a failure in itself, said first routing unit is configured to deactivate itself to cease managing said input and output data and allow said second routing unit to start managing said input and output data (*Li, Fig. 1, the active router fails or resigns itself, then it sends the resign message, the new or standby router assume the active router (Fig. 5, box 190; col. 1, lines 24-31; col. 1, line 66 - col. 3, line 3; col. 3, line 23 – col. 4, line 45; col. 3, line 46 – col. 5, line 51)*).

Claim Rejections - 35 USC § 103

13. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the

Art Unit: 2142

invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

14. Claim 20 is rejected under 35 U.S.C. 103(a) as being unpatentable over Li as applied to claims 17-19 above, and further in view of **Nguyen** US patent # **5,506,790**.

15. As to claim 20, Li does not explicitly disclose, wherein said at least one serial link comprises at least one Y-split parallel cable.

In the same field of endeavor, Nguyen discloses the Y-Split cable (*Nguyen, Fig. 1; col. 5, line 59 – col. 7, line 40*).

Accordingly, it would have been obvious to one of ordinary skill in the networking art at the time the invention was made to have incorporated Nguyen's teachings of Split Y cable (*Nguyen, Fig. 1; col. 5, line 59 – col. 7, line 40*) with the teachings of Li, for the purpose of *sharing communication data between the computer and the network device* (*Nguyen, Fig. 1; col. 5, line 59 – col. 7, line 40*).

16. Claims 22-26, 28-44 are rejected under 35 U.S.C. 103(a) as being unpatentable over Li-Nguyen as applied to claims 17-21 above, and further in view of **Moore** US patent # **5,475,846**.

17. As to claim 22, Li-Nguyen does not explicitly disclose, a change in an impedance of at least one input/output serial port.

In the same field of endeavor, Moore, discloses a change in an impedance of at least one input/output serial port (*Moore, claims 1, 5, 8, 9*).

Accordingly, it would have been obvious to one of ordinary skill in the networking art at the time the invention was made to have incorporated Moore's teachings of

Art Unit: 2142

change in I/O serial port (*Moore, claims 1, 5, 8, 9*) with the teachings of Li-Nguyen, for the purpose of *sharing of interrupts between devices* (*Moore, Abstract, col. 3, lines 1-7*).

18. As to claim 23, Li-Nguyen-Moore discloses, wherein the change in impedance imparts putting said at least one input/output serial port in a high impedance state (*Moore, Abstract; claims 1, 5, 8, 9*).

19. As to claim 24, Li-Nguyen-Moore discloses, wherein said second routing unit deactivates said first routing unit by sending a reset command (*Li, sending coup message*) to said first routing unit via the standby bus, said reset command executing a reset algorithm on said first routing unit (*Li, Figs. 1, 2, 4, 5; col. 1, lines 39-51; col. 2, line 15 – col. 3, line 40*).

20. As to claim 25, Li-Nguyen-Moore discloses, wherein polling messages are exchanged via said network and standby bus interfaces, said polling messages carrying information relevant to detecting said failure (*Li, Figs. 1, 2, 4, 5; col. 1, lines 39-51; col. 2, line 15 – col. 3, line 40*).

21. As to claim 26, Li-Nguyen-Moore discloses, wherein said second routing unit detects said failure of said first routing unit when said polling messages (*Li, Hello messages*) are not properly responded to on at least one of said network and standby bus interfaces (*Li, Figs. 1, 2, 4, 5; col. 1, lines 39-51; col. 2, line 15 – col. 3, line 40*).

22. As to claim 28, Li-Nguyen-Moore discloses, wherein, when launching an application on said first and second routing units, the set of parameters (*Li, preference values*) appropriate to said application is loaded into a random access memory (RAM) (*Li, Figs. 1, 2, 4, 5; col. 1, lines 39-51*).

Art Unit: 2142

23. As to claim 29, Li-Nguyen-Moore discloses, wherein said network interface links said first and second routing units with at least one remote client system (*Li, Figs. 1, 2; col. 1, lines 39-51; col. 2, line 15 – col. 3, line 40*).

24. As to claim 30, Li-Nguyen-Moore discloses, wherein said network interface is the Internet (*Li, Figs. 1, 2; WAN; col. 5, line 10 – col. 6, line 57*).

25. As to claim 31, Li-Nguyen-Moore discloses, wherein said network interface is an Ethernet network (*Figs. 1, 2; col. 5, line 10 – col. 6, line 57*).

26. As to claim 32, Li-Nguyen-Moore discloses, wherein said network interface is a digital local area network (LAN) (*Figs. 1, 2; LAN; col. 5, line 10 – col. 6, line 57*).

27. As to claim 33, Li-Nguyen-Moore discloses, wherein said first and second routing units operate in Open Communication Processor (OCP) mode (*Li, Figs. 1, 2; LAN; col. 5, line 10 – col. 6, line 57*).

28. As to claim 34, Li-Nguyen-Moore discloses, an alert protocol (*Li, a standby protocol*) to warn of a possible failure of the system (*Li, Figs. 1, 2; col. 1, lines 39-51; col. 2, line 15 – col. 3, line 40; col. 5, line 10 - col. 6, line 67*).

29. As to claim 35, Li-Nguyen-Moore discloses, wherein said first and second routing units are data routers (*Li, Figs. 1, 2; col. 1, lines 39-51; col. 2, line 15 – col. 3, line 40; col. 5, line 10 - col. 6, line 67*).

30. As to claim 36, Li-Nguyen-Moore discloses, wherein said first and second routing units are data servers (*Li, Figs. 1, 2; col. 1, lines 39-51; col. 2, line 15 – col. 3, line 40; col. 5, line 10 - col. 6, line 67*).

31. As top claim 37, Li-Nguyen-Moore discloses, wherein, after said second routing unit is activated and starts managing input and output data, said first routing unit is configured to detect a failure of said second routing unit (*Li, Figs. 1, 2; col. 1, lines 39-51; col. 2, line 15 – col. 3, line 40; col. 5, line 10 - col. 6, line 67*).

32. As to claim 38, Li-Nguyen-Moore discloses, wherein, when said first routing unit detects a failure in itself, said first routing unit is configured to deactivate itself to cease managing said input and output data and allow second routing unit to start managing said input and output data (*Li, Figs. 1, 2; col. 1, lines 39-51; col. 2, line 15 – col. 3, line 40; col. 5, line 10 - col. 6, line 67*).

33. Claim 39 is corresponding system in means plus function of claim 17; therefore, it is rejected under the same rationale as in claim 17.

34. Claims 40-42 have similar limitation of claims 19, 21, 25; therefore, they are rejected under the same rationale as in claims 19, 21, 25.

35. As to claim 43, Li-Nguyen-Moore discloses, wherein the at least one configuration file further includes the messages themselves, at least one transmission interval (*Li, period between hello messages*) between the messages, and at least one time limit between two messages (*Li, Figs. 1, 2; col. 1, lines 39-51; col. 2, line 15 – col. 3, line 40; col. 5, line 10 - col. 6, line 67*).

36. Claim 44 has similar limitations of claim 43; therefore, it is rejected under the same rationale as in claim 43.

Claim Rejections - 35 USC § 102

37. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102(b) that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

38. Claims 17-19, 21 are rejected under 35 U.S.C. 102(b) as being anticipated by **Coile et al. et al. US patent # 6,108,300.**

39. As to claim 17, Coile teaches substantially the invention as claimed, including a redundant routing system, comprising:

a first routing unit (*Fig. 1, Primary or active 110; Fig. 2, Primary or active 210*)

configured to manage input and output data;

a second routing unit (*Fig. 1, Secondary or Standby 110; Fig. 2, Secondary or Standby 210*) configured to manage input and output data;

a network interface (*Figs. 1, 2*) connecting said first and second routing units;

a standby bus interface (*Fig. 2, Failover cable 230*) connecting said first and second routing units to each other;

wherein, when said first routing unit is managing said input and output data, said second routing unit is configured to detect a failure of said first routing unit by monitoring both said network and standby bus interfaces using messages (*confirmation messages*) sent over both the network and the standby bus interface (*Abstract, Figs. 1-3, col. 2, line 29 – col. 3, line 17; col. 3, line 66 – col. 4, line 16; col. 5, line 13 – col. 6, line 42*);

Art Unit: 2142

wherein, when said second routing unit detects a failure of said first routing unit, said second routing unit is configured to deactivate said first routing unit so that said first routing unit no longer manages said input and output data and said second routing unit is further configured to start managing said input and output (*Fig. 3, col. 6, line 43 – col. 7, line 35*); and

wherein set of parameters (*Fig. 3, state flags 331-333*) for interpreting the messages, comprising configuration parameters of an application running on at least one of the first and second routing units, are stored in at least one configuration file included in both said first and second routing units (*Fig. 3, col. 6, line 43 – col. 7, line 35*).

40. As to claim 18, Coile teaches, wherein said first and second routing units have identical functions and include identical software and configuration files (*Figs. 1, 2, 3*).

41. As to claim 19, Coile teaches, further comprising at least one serial link connecting said first and second routing units to at least one other system (*Figs. 1, 2, client system*).

42. As to claim 21, Coile teaches, when said first routing unit detects a failure in itself, said first routing unit is configured to deactivate itself to cease managing said input and output data and allow said second routing unit to start managing said input and output data (*Fig. 3, col. 6, line 43 – col. 7, line 35*).

Claim Rejections - 35 USC § 103

43. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the

Art Unit: 2142

invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

44. Claim 20 is rejected under 35 U.S.C. 103(a) as being unpatentable over Coile as applied to claims 17-19 above, and further in view of **Nguyen** US patent # **5,506,790**.

45. As to claim 20, Coile does not explicitly disclose, wherein said at least one serial link comprises at least one Y-split parallel cable.

In the same field of endeavor, Nguyen discloses the Y-Split cable (*Nguyen, Fig. 1; col. 5, line 59 – col. 7, line 40*).

Accordingly, it would have been obvious to one of ordinary skill in the networking art at the time the invention was made to have incorporated Nguyen's teachings of Split Y cable (*Nguyen, Fig. 1; col. 5, line 59 – col. 7, line 40*) with the teachings of Coile, for the purpose of *sharing communication data between the computer and the network device* (*Nguyen, Fig. 1; col. 5, line 59 – col. 7, line 40*).

46. Claims 22-26, 28-44 are rejected under 35 U.S.C. 103(a) as being unpatentable over Coile-Nguyen as applied to claims 17-21 above, and further in view of **Moore** US patent # **5,475,846**.

47. As to claim 22, Coile-Nguyen does not explicitly disclose, a change in an impedance of at least one input/output serial port.

In the same field of endeavor, Moore, discloses a change in an impedance of at least one input/output serial port (*Moore, claims 1, 5, 8, 9*).

Accordingly, it would have been obvious to one of ordinary skill in the networking art at the time the invention was made to have incorporated Moore's teachings of change in I/O serial port (*Moore, claims 1, 5, 8, 9*) with the teachings of Coile-Nguyen,

Art Unit: 2142

for the purpose of *sharing of interrupts between devices* (Moore, Abstract, col. 3, lines 1-7).

48. As to claim 23, Coile-Nguyen-Moore discloses, wherein the change in impedance imparts putting said at least one input/output serial port in a high impedance state (Moore, Abstract; claims 1, 5, 8, 9).

49. As to claim 24, Coile-Nguyen-Moore discloses, wherein said second routing unit deactivates said first routing unit by sending a reset command to said first routing unit via the standby bus, said reset command executing a reset algorithm on said first routing unit (Coile, Abstract, Figs. 1-3, col. 2, line 29 – col. 3, line 17; col. 3, line 66 – col. 4, line 16; col. 5, line 13 – col. 6, line 42; col. 6, line 43 – col. 7, line 35).

50. As to claim 25, Coile-Nguyen-Moore discloses, wherein polling messages are exchanged via said network and standby bus interfaces, said polling messages carrying information relevant to detecting said failure (Coile, Abstract, Figs. 1-3, col. 2, line 29 – col. 3, line 17; col. 3, line 66 – col. 4, line 16; col. 5, line 13 – col. 6, line 42; col. 6, line 43 – col. 7, line 35).

51. As to claim 26, Coile-Nguyen-Moore discloses, wherein said second routing unit detects said failure of said first routing unit when said polling messages are not properly responded to on at least one of said network and standby bus interfaces (Coile, Abstract, Figs. 1-3, col. 2, line 29 – col. 3, line 17; col. 3, line 66 – col. 4, line 16; col. 5, line 13 – col. 6, line 42; col. 6, line 43 – col. 7, line 35).

52. As to claim 28, Coile-Nguyen-Moore discloses, wherein, when launching an application on said first and second routing units, the set of parameters appropriate to

said application is loaded into a random access memory (RAM) (*Coile, Abstract, Figs. 1-3, col. 2, line 29 – col. 3, line 17; col. 3, line 66 – col. 4, line 16; col. 5, line 13 – col. 6, line 42; col. 6, line 43 – col. 7, line 35*).

53. As to claim 29, Coile-Nguyen-Moore discloses, wherein said network interface links said first and second routing units with at least one remote client system (*Coile, Abstract, Figs. 1-3, col. 2, line 29 – col. 3, line 17; col. 3, line 66 – col. 4, line 16; col. 5, line 13 – col. 6, line 42; col. 6, line 43 – col. 7, line 35*).

54. As to claim 30, Coile-Nguyen-Moore discloses, wherein said network interface is the Internet (*Coile, Abstract, Figs. 1-3, col. 2, line 29 – col. 3, line 17; col. 3, line 66 – col. 4, line 16; col. 5, line 13 – col. 6, line 42; col. 6, line 43 – col. 7, line 35*).

55. As to claim 31, Coile-Nguyen-Moore discloses, wherein said network interface is an Ethernet network (*Coile, Abstract, Figs. 1-3, col. 2, line 29 – col. 3, line 17; col. 3, line 66 – col. 4, line 16; col. 5, line 13 – col. 6, line 42; col. 6, line 43 – col. 7, line 35*).

56. As to claim 32, Coile-Nguyen-Moore discloses, wherein said network interface is a digital local area network (LAN) (*Coile, Abstract, Figs. 1-3, col. 2, line 29 – col. 3, line 17; col. 3, line 66 – col. 4, line 16; col. 5, line 13 – col. 6, line 42; col. 6, line 43 – col. 7, line 35*).

57. As to claim 33, Coile-Nguyen-Moore discloses, wherein said first and second routing units operate in Open Communication Processor (OCP) mode (*Coile, Abstract, Figs. 1-3, col. 2, line 29 – col. 3, line 17; col. 3, line 66 – col. 4, line 16; col. 5, line 13 – col. 6, line 42; col. 6, line 43 – col. 7, line 35*).

Art Unit: 2142

58. As to claim 34, Coile-Nguyen-Moore discloses, an alert protocol to warn of a possible failure of the system (*Coile, Abstract, Figs. 1-3, col. 2, line 29 – col. 3, line 17; col. 3, line 66 – col. 4, line 16; col. 5, line 13 – col. 6, line 42; col. 6, line 43 – col. 7, line 35*).

59. As to claim 35, Coile-Nguyen-Moore discloses, wherein said first and second routing units are data routers (*Coile, Abstract, Figs. 1-3, col. 2, line 29 – col. 3, line 17; col. 3, line 66 – col. 4, line 16; col. 5, line 13 – col. 6, line 42; col. 6, line 43 – col. 7, line 35*).

60. As to claim 36, Coile-Nguyen-Moore discloses, wherein said first and second routing units are data servers (*Coile, Abstract, Figs. 1-3, col. 2, line 29 – col. 3, line 17; col. 3, line 66 – col. 4, line 16; col. 5, line 13 – col. 6, line 42; col. 6, line 43 – col. 7, line 35*).

61. As to claim 37, Coile-Nguyen-Moore discloses, wherein, after said second routing unit is activated and starts managing input and output data, said first routing unit is configured to detect a failure of said second routing unit (*Coile, Abstract, Figs. 1-3, col. 2, line 29 – col. 3, line 17; col. 3, line 66 – col. 4, line 16; col. 5, line 13 – col. 6, line 42; col. 6, line 43 – col. 7, line 35*).

62. As to claim 38, Coile-Nguyen-Moore discloses, wherein, when said first routing unit detects a failure in itself, said first routing unit is configured to deactivate itself to cease managing said input and output data and allow second routing unit to start managing said input and output data (*Coile, Abstract, Figs. 1-3, col. 2, line 29 – col. 3,*

Art Unit: 2142

line 17; col. 3, line 66 – col. 4, line 16; col. 5, line 13 – col. 6, line 42; col. 6, line 43 – col. 7, line 35).

63. Claim 39 is corresponding system in means plus function of claim 17; therefore, it is rejected under the same rationale as in claim 17.

64. Claims 40-42 have similar limitation of claims 19, 21, 25; therefore, they are rejected under the same rationale as in claims 19, 21, 25.

65. As to claim 43, Coile-Nguyen-Moore discloses, wherein the at least one configuration file further includes the messages themselves, at least one transmission interval (*Coile, periodically sent messages*) between the messages, and at least one time limit between two messages (*Coile, Abstract, Figs. 1-3, col. 2, line 29 – col. 3, line 17; col. 3, line 66 – col. 4, line 16; col. 5, line 13 – col. 6, line 42; col. 6, line 43 – col. 7, line 35*).

66. Claim 44 has similar limitations of claim 43; therefore, it is rejected under the same rationale as in claim 43.

67. Further references of interest are cited on Form PTO-892, which is an attachment to this action.

Conclusion

68. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hai V. Nguyen whose telephone number is 571-272-3901. The examiner can normally be reached on 6:00-3:30 Mon-Fri.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Andrew Caldwell can be reached on 571-272-3868. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 2142

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Hai V. Nguyen
Examiner
Art Unit 2142



PHONG VU
P.E.
2142